

# LOUISVILLE - JEFFERSON COUNTY METRO GOVERNMENT AIR POLLUTION CONTROL DISTRICT TITLE V OPERATING PERMIT

Permit No.: 140-97-TV (R1) Plant ID: 0001

Effective Date: 28 September 2001 Expiration Date: 28 September 2006

UTM Northing: 4230.7 UTM Easting: 602.0

SIC: 2813 & 2869 NAICS: 32512 & 325199 AFS: 00001

Permission is hereby given by the Louisville - Jefferson County Metro Government Air Pollution Control District to operate equipment located at:

Carbide Industries LLC 4400 Bells Lane Louisville KY 40211

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. This permit and the authorization to operate the emission units listed shall expire on midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Applicant for Permit: Carbide Industries LLC

Responsible Official: Ara Hacetoglu

Title of Responsible Official: President

Date Application Received: 22 April 1997 Revised: 29 February 2000

Date Application Administratively Complete: 29 May 1997, 28 April 2000, 31 January 2003

Date Public Notice Given: 9 February 2003

Reviewing Engineer (58)

# Air Pollution Control Officer

# **Table of Contents**

Title V Permit Revisions/Changes
Abbreviations and Acronyms
Preamble
General Conditions
Emission Unit U1 Description: Lime Handling System
Emission Unit U2 Description: Coke Handling Unit Applicable Regulations Allowable Emissions Components Additional Conditions Comments  23
Emission Unit U3 Description: Charge Mix Unit Applicable Regulations Allowable Emissions Components Additional Conditions Comment 25
Emission Unit U4 Description: Furnace Unit Applicable Regulations Allowable Emissions Components Additional Conditions Comments 30 31 32 33
Emission Unit U5 Description: Crush Unit

Emission Unit U6 Description: Pack & Screen Unit	. 44
Applicable Regulations	. 44
Allowable Emissions	. 44
Components	. 44
Additional Conditions	
Comments	
Emission Unit U7 Description: Above-ground Fuel Storage Tanks	51
Applicable Regulations	
Allowable Emissions	
Component	
Additional Conditions	
Additional Conditions	. 34
Enciona Hait HO Descriptions A saturday and Hadrote Hait	_
Emission Unit U8 Description: Acetylene and Hydrate Unit	
Applicable Regulations	
Allowable Emissions	
Components	
Additional Conditions	
Comment	. 58
Emission Unit U9 Description: One, 3 MMBtu Boiler	
Applicable Regulations	
Allowable Emissions	
Component	. 59
Additional Conditions	. 60
Comment	. 62
Unit U10 Description: Storm water Neutralization Unit	. 63
Applicable Regulations	
Allowable Emissions	
Components	. 63
Additional Conditions	
Emission Unit U11 Description: Tote Reconditioning Unit	. 64
Applicable Regulations	
Allowable Emissions	
Components	
Additional Conditions	
Additional Conditions	. 00
Emission Unit U12 Description: Non-halogenated Cold Solvent Metal Cleaners	70
· · · · · · · · · · · · · · · · · · ·	
Applicable Regulations	
Allowable Emissions	
Components	
Additional Conditions	. /
Domait Chiald	7

Permit No. 140-97-TV (R1)	Plant ID 0001
Off-Permit Documents	74
Alternative Operating Scenario	74
Source-Wide HAP Speciation	74
Insignificant Activities	

# Title V Permit Revisions/Changes

Revision No.	Date of Reissuance	Public Notice Date	Туре	Emission Unit/Page No.	Description
Initial	09/28/2001	12/24/2000	Initial	Entire Permit	Entire Permit
Rev. 1		02/09/2003	Administrative	Cover page	Changed name of company, owner, and responsible official

## **Abbreviations and Acronyms**

AC - Additional ConditionAFS - AIRS Facility Subsystem

AIRS - Aerometric Information Retrieval System

APCD - Air Pollution Control DistrictASL - Adjusted Significant Level

atm - Atmosphere

BACT - Best Available Control Technology

Btu - British Thermal Unit °C - Degrees Centigrade

CEMS - Continuous Emission Monitoring System

CAAA - Clean Air Act Amendments (15 November 1990)

cf - Cubic foot

DOE - District Only Enforceable°F - Degrees Fahrenheit

gal - Gallon

HAP - Hazardous Air Pollutant

Hg - Mercury hr - hour lbs - Pounds l - Liter

MACT - Maximum Achievable Control Technology

m - Meter mg - Milligram mm - Millimeter MM - Million

MOCS - Management of Change System

NAICS - North American Industry Classification System

NSR - New Source Review NO<sub>v</sub> - Nitrogen oxides

NSPS - New Source Performance Standards

PM - Particulate Matter

PM<sub>10</sub> - Particulate matter less than 10 microns

ppm - Parts per million

PSD - Prevention of Significant Deterioration

PMP - Preventive Maintenance Plan psia - Pounds per square inch absolute

RACT - Reasonably Available Control Technology

SIC - Standard Industrial Classification

SIP - State Implementation Plan

SO<sub>2</sub> - Sulfur dioxide

TAL - Threshold Ambient LimitTAP - Toxic Air Pollutant

tpy - Tons per year

UTM - Universal Transverse MercatorVOC - Volatile Organic Compound

#### **Preamble**

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Air Pollution Control District (APCDJC) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit general conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of APCDJC. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The general conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a list of "insignificant activities," which are activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Activities so identified may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply and must be included in the Title V operating permit. No periodic monitoring shall be required for facilities designated as insignificant activities.

#### **General Conditions**

- 1. <u>Compliance</u> The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)
- 2. <u>Compliance Certification</u> The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

US EPA - Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-8960

- 3. <u>Compliance Schedule</u> A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
  - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
- 4. **<u>Duty to Supplement or Correct Application</u>** If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

## 5. <u>Emergency Provision</u>

- a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - i. An emergency occurred and that the owner or operator can identify the cause of the emergency.
  - ii. The permitted facility was at the time being properly operated.
  - iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.
  - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement.

(Regulation 2.16, sections 4.7.1 through 4.7.4)

- 6. <u>Emission Fees Payment Requirements</u> The owner or operator shall pay annual emission fees in accordance with Regulation 2.08. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.3)
- 7. <u>Emission Offset Requirements</u> The owner or operator shall comply with the requirements of Regulation 2.04.
- 8. <u>Enforceability Requirements</u> Except for the conditions that are specifically designated as "District Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)

#### 9. **Enforcement Action Defense**

- a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation.

(Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)

- 10. <u>Hazardous Air Pollutants and Sources Categories</u> The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
- 11. <u>Information Requests</u> The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6) If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)
- 12. <u>Insignificant Activities</u> The owner or operator shall notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)
- 13. <u>Inspection and Entry</u> Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:
  - a. Enter the premises to inspect any emissions-related activity or records required in this permit.
  - b. Have access to and copy records required by this permit.
  - c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
  - d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.
     (Regulation 2.16, section 4.3.2)

- 14. Monitoring and Related Record keeping and Reporting Requirements The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes.
- 15. Off-permit Documents Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. (Regulation 2.16, section 4.1.5)
- 16. **Operational Flexibility** The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
- 17. **Permit Amendments (Administrative)** This permit can be administratively amended by the District in accordance with Regulation 2.16, sections 2.3 and 5.4.
- 18. **Permit Application Submittal** The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
- 19. **Permit Duration** This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
- 20. **Permit Renewal, Expiration and Application** Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.
- 21. <u>Permit Revisions</u> No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)
- 22. **Permit Revision Procedures (Minor)** Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
- 23. <u>Permit Revision Procedures (Significant)</u> A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.

- 24. **Permit Revocation and Termination by the District** The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1.1 through 5.11.1.5. For purposes of Section 5, substantial or unresolved noncompliance includes, but is not limited to:
  - a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.
  - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.
  - c. Knowingly making any false statement in any permit application.
  - d. Noncompliance with Regulation 1.07, section 4.2; or
  - e. Noncompliance with KRS Chapter 77.
- 25. **Permit Shield** The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
- 26. <u>Prevention of Significant Deterioration of Air Quality</u> The owner or operator shall comply with the requirements of Regulation 2.05.
- 27. **Property Rights** This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
- 28. <u>Public Participation</u> Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
- 29. **Reopening For Cause** This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
- 30. **Reopening for Cause by EPA** This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
- 31. **Risk Management Plan (112(r))** For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
- 32. <u>Severability Clause</u> The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)

- 33. <u>Stack Height Considerations</u> The owner or operator shall comply with the requirements of Regulation 2.10.
- 34. <u>Startups, Shutdowns, and Malfunctions Requirements</u> The owner or operator shall comply with the requirements of Regulation 1.07.
- 35. <u>Submittal of Reports, Data, Notifications, and Applications</u>
  - a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.11.7 shall be submitted to:

Air Pollution Control District of Jefferson County 850 Barret Ave Louisville, KY 40204-1745

b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:

US EPA - Region IV APTMD - 12th floor Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-3104

36. Other Applicable Regulations - The owner or operator shall comply with all applicable requirements of the following regulations:

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation	Regulation Title		
1.01	General Application of Regulations and Standards		
1.02	Definitions		
1.03	Abbreviations and Acronyms		
1.04	Performance Tests		
1.05	Compliance with Emission Standards and Maintenance Requirements		
1.06	Source Self-Monitoring and Reporting		
1.07	Emissions During Startups, Shutdowns, Malfunctions, and Emergencies		
1.08	Administrative Procedures		
1.09	Prohibition of Air Pollution		
1.10	Circumvention		
1.11	Control of Open Burning		

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation	Title		
1.14	Control of Fugitive Particulate Emissions		
2.01	General Application		
2.02	Air Pollution Regulation Requirements and Exemptions		
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits		
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits		
2.09	Causes for Permit Suspension		
2.10	Stack Height Considerations		
2.11	Air Quality Model Usage		
2.16	Title V Operating Permits		
4.01	General Provisions for Emergency Episodes		
4.02	Episode Criteria		
4.03	General Abatement Requirements		
4.07	Episode Reporting Requirements		
5.01	General Provisions (for Hazardous Air Pollutants)		
5.03	Potential Hazardous Emissions		
6.01	General Provisions (for Existing Affected Facilities)		
6.02	Emission Monitoring for Existing Sources		
7.01	General Provisions (for New Affected Facilities)		

DISTRICT ONLY ENFORCEABLE REGULATIONS				
Regulation Title				
1.12	Control of Nuisances			
1.13	1.13 Control of Objectionable Odors in the Ambient Air			
2.08	2.08 Emissions Fees, Permit Fees, Permit Renewal Procedures, and Additional Program Fees			
8.03	Commuter Vehicle Testing Requirements			

Emission Unit U1 Description: Lime Handling System

# **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation Title Applicable Section(s			
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, & 3.2	

## **Allowable Emissions:**

Pollutant	Limit/Standard	Applicable Regulation	
PM	30.5 pounds / hour	7.08, section 3.1.2	
Opacity	< 20%	7.08, section 3.1.1	

# **Components:**

Lime handling system, which is composed of material handling equipment, sheltered with openings near base of structure. Control for some of the FEP equipment is provided by the EP7 - F1 baghouse associated with the Emission Unit U3.

FEP 001	Unloading hopper (fugitive)
FEP 002	Transfer Point to bucket elevator (covered)
FEP 004	Transfer Point to bucket elevator, controlled by (EP7 - F1 baghouse)
FEP 003	Transfer Point at unloading hopper, controlled by (EP7 - F1 baghouse)
FEP 005	Lime storage bin controlled by bin vent
FEP 006	Weigh Belt loading, partially controlled by (EP7 - F1 baghouse)
FEP 007	Weigh Belt loading, partially controlled by (EP7 - F1 baghouse)

#### **Additional Conditions**

- 1. **Standards** (Regulation 2.16, Section 4.1.1)
  - a. **Opacity** (Regulation 7.08, Section 3.1.1)

The owner or operator shall not cause to be discharged into the atmosphere, any gases that contain PM equal to or in excess of 20% opacity.

b. **PM** (Regulation 7.08, Section 3.1.2)

The owner or operator shall not allow the emission of PM to exceed 30.5 pounds per hour.

- 2. **Monitoring** (Regulation 2.16, Section 4.1.9.1.2)
  - a. **Opacity** 
    - i. The owner or operator shall, to demonstrate compliance with the opacity standard, conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the Emission Points FEP 001 through FEP 007.
    - ii. For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours.
    - iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 22 for fugitive emissions and a Method 9 for stack emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in Additional Condition 2.a.i.
    - iv. If an Emission Point is not being operated during a given week, then no visible emission survey needs to be performed and a negative declaration may be entered in the record.
  - b. **PM** See Additional Condition 3.b. below and 3.b in Emission Unit U3.
- 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)
  - a. **Opacity**

- i. Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed.
- ii. If emission points are not in operation when the survey in conducted, records shall be maintained, indicating this inactive condition.

#### b. **PM**

- i. The owner or operator shall keep records of process throughput and hours of operation for calculation of PM emissions. The PM emissions shall be calculated by multiplying the throughput times the emission factor. Such fugitive emissions from this entire process are calculated using an emission factor of 0.12 lbs (emissions) per ton (throughput). The source for this emission factor is AP-42 guideline 1.24, for all low moisture minerals.
- ii. See Additional Condition 3.b in Emission Unit U3.

## 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

### a. **Opacity**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports:

- i. Emission Unit ID number and Emission ID number
- ii. The beginning and ending date of the reporting period.
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none)
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. **PM**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports:

- i. Emission Unit ID number and Emission Point ID number or FEP number;
- ii. The beginning and ending date of the reporting period
- iii. Identification of all periods of exceedances, if any, of the hourly PM emissions limit including the quantity of excess emissions.

iv. Description of any corrective action taken or a negative declaration, if no corrective action was taken.

#### **Comments**

- 1. Some FEP numbers are for facilities which have particulate matter fugitive emissions directly to the outside air. Others are descriptions of equipment that are part of the emission unit.
- 2. The Title V permit application shows all FEP equipment in this EP being installed in 1968. A control device was added to Emission Unit 3 and some control was achieved for this Emission Unit, this does not constitute a modification. However, other equipment was added that did make this Emission unit subject to new source regulation 7.08.
- 3. Emission Unit U1 constitutes all of emission point EP 001. For clarity sake, the designation EP 001 has been removed from this unit.

Emission Unit U2 Description: Coke Handling Unit

## **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS				
Number	Title	Applicable Section(s)		
6.09	Standards of Performance for Existing Process Operations	1, 2, 3.1, 3.2, 3.3, 3.4, & 5		
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, & 3.2		

#### **Allowable Emissions:**

<b>Emission Point</b>	Pollutant	Limit/Standard	Applicable Regulation
	Opacity	<20%	6.09, section 3.3.1
EP 002	PM	30.5 pounds/hour	6.09, section 3.4
	$NO_X$	300 ppm	6.09, Section 4
	PM	23.0 pounds/hour	7.08, section 3.1.2
EP 003	Opacity	<20%	7.08, section 3.1.1

# **Components:**

#### Emission Point EP 002:

One gas fired rotary coke dryer;

EP2 - F2 control system, one pulse type dust collector installed in 1987. No FEP #'s for this Emission Point.

#### Emission Point EP 003:

Coke handling system which is a group of controlled and uncontrolled emissions points from materials handling equipment. Partial control for some of the FEP's is provided by the EP7 - F1 baghouse associated with the Emission Unit U3.

FEP 8	Ground storage (fugitive)
FEP 9	Front loader movements (fugitive)
FEP 10	Grade Hopper Loading (fugitive)
FEP 11	Transfer point (no underlying regulatory requirements)

FEP 12	Transfer point, conveyor to coke dryer (above ground outside building)
FEP 13	Transfer point (belt conveyors), partially controlled by EP2 - F2 baghouse
	(emits some fugitive emissions)
FEP 14	Bucket elevator loading (fugitive), partially controlled by EP2 - F2 baghouse
FEP 15	F2 baghouse unloading (fugitive and outside building)
FEP 16	Weigh belt for coke, controlled by EP7 - F1 baghouse, installed in 1984
FEP 17	Weigh belt for coke, controlled by EP7 - F1 baghouse, installed in 1984

#### **Additional Conditions**

- 1. **Standards** (Regulation 2.16, section 4.1)
  - a. **Opacity** (Regulation 6.09, section 3.3.1) and (Regulation 7.08, section 3.1.1)

The owner or operator shall not cause to be discharged into the atmosphere, any gases that contain PM equal to or in excess of 20% opacity.

#### b. **PM**

- i. The owner or operator shall, for EP 002, not allow the emission of PM to exceed 30.5 pounds per hour.
- ii. The owner or operator shall, for EP 003, not allow the emission of PM to exceed 23.0 pounds per hour.
- c. **NO**<sub>x</sub> (Regulation 6.09, Section 4)

The owner or operator shall, for EP 002, not allow the emission of  $NO_x$  to exceed 300 ppm by volume, expressed as  $NO_2$  or an invisible discharge.

#### 2. **Monitoring** (Regulation 2.16, Section 4.1.9.1.2)

#### a. **Opacity**

- i. The owner or operator shall, to demonstrate compliance with the opacity standard, for EP 002 and FEP 008 and FEP 012 through FEP 017, conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours.
- ii. For the Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 22 for fugitive emissions and a Method 9 for stack emissions from EP2-F2 within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in Additional Condition 2.a.i.

#### b. **PM**

- i. Monitoring is not required for EP 002 as calculations show that the applicable PM emission limit of 30.5 pounds per hour cannot be exceeded without controls.
- ii. See Additional Condition 2.b in Emission Unit U3 for the control for EP 003.
- iii. The owner or operator shall maintain and operate a fugitive dust suppression watering device that shall be used during periods of dry windy weather and at other times as the company deems necessary for FEP 8.

#### c. NO<sub>x</sub>

See Additional Condition 3.c.

## 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

#### a. **Opacity**

- i. Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed.
- ii. If emission points are not in operation when the survey in conducted, records shall be maintained, indicating this inactive condition.

#### b. **PM**

- i. The owner or operator shall keep records of process throughput and hours of operation for calculation of PM emissions. The PM emissions shall be calculated by multiplying the throughput times the emission factor. Such fugitive emissions from this entire process are calculated using an emission factor of 0.12 lbs (emissions) per ton (throughput). The source for this emission factor is AP-42 guideline 1.24, for all low moisture minerals.
- ii. Record keeping is not required for EP 002.
- iii. See Additional Condition 4.b in Emission Unit U3 for the control for EP 003.
- iv. Records shall be maintained containing the dates and duration of the use of the watering device for FEP8.

#### c. NO<sub>x</sub>

The owner or operator shall keep records of natural gas usage and hours of operation.

## 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

## a. **Opacity**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for opacity:

- i. Emission Unit ID number and Emission ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none)
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. **PM**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for EP 003

- i. Emission Unit ID number and Emission ID number
- ii. The beginning and ending date of the reporting period
- iii. The beginning and ending date of the reporting period.
- iv. Identification of all periods of exceedances, if any, of the hourly PM emissions limit including the quantity of excess emissions.
- v. Description of any corrective action taken.
- vi. No PM compliance reports are required for EP 002.

#### c. $NO_x$

No NO<sub>x</sub> compliance reports are required for EP 002

#### **Comments**

- 1. FEP 011 is a Transfer point and is located underground. It does not emit to the outside. This is an equipment description.
- 2. The 300 ppm NO<sub>x</sub> limit cannot be exceeded at the maximum fuel combustion rate for the Coke Dryer. This is based on an emission factor from a stack tests at the owner/operators

Calvert City, KY plant and from AP-42 section 1.4 as revised on October 1996 for natural gas combustion. Combined, these show that  $NO_x$  emissions are < 300 ppm, for EP2 - F2 at the maximum consumption rate of natural gas 349.88 cfm is equivalent to 183.9 MMCF per year. The owner or operator has demonstrated this by calculation in the Title V permit application.

- 3. To demonstrate compliance with Regulation 7.08, for Emission Point EP 002, the owner or operator has demonstrated in the Title V permit application, that the PM hourly uncontrolled emission rate calculated using the maximum hourly processing rate of 20 tons /hr cannot exceed the corresponding Table 1 PM emission value in the regulation.
- 4. Control for some of the FEP's listed under EP 003 is provided by the EP7 F1 baghouse. This baghouse also provides control for emissions points at Emission Unit 3. Monitoring, Record keeping and Reporting requirements for this control device are located in Emission Unit 3.

Emission Unit U3 Description: Charge Mix Unit

## **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Section(s)
6.09	Standards of Performance for Existing Process Operations	1, 2, 3.1, 3.2, 3.3, 3.4, & 5

#### **Allowable Emissions:**

<b>Emission Point</b>	Pollutant	Limit/Standard	Applicable Regulation
	Opacity	<20%	6.09, section 3.3.1
EP 007	PM	42.75 pounds/hour	6.09, section 3.4
	Opacity	<20%	6.09, section 3.3.1
EP 009	PM	42.75 pounds/hour	6.09, section 3.4

# **Components:**

## Emission Point EP 007

Charge mix operations, which is composed of materials handling equipment, with control provided by the EP7 - F1 baghouse.

## Emission Point EP 009

Charge mix system which is composed of material handling equipment, all located under roof. Control is provided by either the EP7 - F1 baghouse or the EP6 - F3 baghouse (located in Emission Unit U4).

FEP 018	Transfer Point to inclined belt to north, controlled by EP7 - F1 baghouse.
FEP 019	Transfer Point to inclined belt to south, controlled by EP7 - F1 baghouse.
FEP 020	Transfer Point to inclined belt to north (coke), controlled by EP7 - F1
	baghouse.
FEP 021	Transfer Point to inclined belt to south (coke), controlled by EP7 - F1
	baghouse.
FEP 022	Transfer Point to inclined belt to south, controlled by EP7 - F1 baghouse.
FEP 023	Transfer Point to belt conveyor to furnace, controlled by EP6 - F3 baghouse
FEP 024	Transfer Point to rotary conveyor above furnace, controlled by EP6 - F3
	baghouse

#### **Additional Conditions**

- 1. **Standards** (Regulation 2.16, Section 4.1.1)
  - a. **Opacity** (Regulation 6.09, Section 3.1)

The owner or operator shall not cause to be discharged into the atmosphere, any gases that contain PM equal to or in excess of 20% opacity.

b. **PM** (Regulation 6.09, Section 3.4)

The owner or operator shall not allow for EP 007, the emission of PM to exceed 42.75 pounds per hour and EP 009 to exceed 42.75 pounds per hour.

- 2. **Monitoring** (Regulation 2.16, Section 4.1.9.1.2)
  - a. **Opacity** 
    - i. The owner or operator shall to demonstrate compliance with the opacity standard, conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, for EP 007 and EP 009. No more than four Emission Points shall be observed simultaneously.
    - ii. For Emission Points without observed visible emissions during twelve consecutive weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
    - iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions from EP7-F1 or Method 22 for fugitive emissions, from building openings for EP 007 and EP 008, within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.a.i.
    - iv. If an Emission Point is not being operated during a given week, then no visible emission survey needs to be performed and a negative declaration may be entered in the record.
  - b. **PM**

- i. Monitoring is not required for Emission Point EP 007 as calculations show that the applicable PM emission limit of 42.75 pounds per hour cannot be exceeded without controls.
- ii. The owner or operator shall keep records of process throughput and hours of operation for EP 009 for calculation of PM emissions.

#### 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

### a. **Opacity**

- i. Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed.
- ii. If emission points are not in operation when the survey in conducted, records shall be maintained, indicating this inactive condition.
- b. **PM** (District Regulation 2.16, section 4.1.9.2)
  - i. Record keeping is not required for EP 007.
  - ii. The PM emissions for EP 009 shall be calculated by multiplying the throughput times the emission factor and divided by the hours of operation. Such fugitive emissions from this entire process are calculated using an emission factor of 0.12 lbs (emissions) per ton (throughput). The source for this emission factor is AP-42 guideline 11.24.

## 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

## a. **Opacity**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for opacity:

- i. Emission Unit ID number and Emission ID number
- ii. The beginning and ending date of the reporting period.
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none)
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. PM

- i. The are no reporting requirements for EP 007
- ii. The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for EP 009
  - 1) Emission Unit ID number and Emission ID number
  - 2) The beginning and ending date of the reporting period
  - 3) The beginning and ending date of the reporting period.
  - 4) Identification of all periods of exceedances, if any, of the hourly PM emissions limit including the quantity of excess emissions.
  - 5) Description of any corrective action taken.

#### **Comment**

To demonstrate compliance with Regulation 6.09, section 3.4, for Emission Point (EP 007), the owner or operator has demonstrated once to the District in this Permit's application, that the PM hourly uncontrolled emission rate calculated using the maximum hourly processing rate cannot exceed the corresponding Table 1 value of the applicable regulation.

Emission Unit U4 Description: Furnace Unit

# **Applicable Regulations**:

	FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Section(s)	
6.09	Standards of Performance for Existing Process Operations	1, 2, 3.1, 3.2, 3.3, 3.4, & 5	
6.10	Standards of Performance for Existing Process Gas Streams	1,2, 4, 6 & 7	
6.46	Standards of Performance for Existing Ferroalloy and Calcium Carbide Production Facilities	1,2, 3,& 4	

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Number	Title	Applicable Section(s)
5.12	Standards of Performance for New Sources Emitting Toxic Air Pollutants	1, 2, 3, 4 & 5
5.14	Hazardous Air Pollutants and Source Categories	1, 2, & 3

#### **Allowable Emissions:**

Identification	Pollutant	Limit/Standard	Applicable Regulation
	Opacity	See Additional Condition 1.a.	6.46, section 3.2
EP 004	$SO_2$	See Additional Condition 1.c.	6.10, Section 4
	СО	See Additional Condition 1.d.	6.10, Section 5
EP 005	Opacity	See Additional Condition 1.a.	6.46, section 3.2
	PM	NA	
EP 006	Opacity	See Additional Condition 1.a.	6.09, section 3.1
	PM	42.75 pounds/hour	6.09, section 3.4
EP 008	Opacity	See Additional Condition 1.a.	6.46, section 3.2
EP 024	Opacity	See Additional Condition 1.a.	6.46 sections 3.1.2.3 & 3.2

## **Components:**

The following emission points are included in this Emission Unit and are listed in the order of process flow:

# Emission point EP 024

Electric arc furnace material charging system which is a group of controlled and uncontrolled fugitive emissions points from materials handling equipment. All of these points are located under roof. Any fugitive emissions are through structure doors and vents. Control for some of these fugitive emissions points is provided by the EP6-F3, EP5-F5, and EP8-F4 baghouses.

FEP 025	9 Charge Bins at the top of furnace, controlled by EP6 - F3 baghouse
FEP 026	9 Charge Chutes, controlled by EP8 - F4 baghouse, installed in 1988
FEP 027	Paste and Coal Tar Pitch (Fugitives)

FEP 028	Tap Fumes, controlled by EP8 - F4 baghouse, installed in 1988
FEP 029	Chill Cart Cooling - no emissions
FEP 030	Chill Mold Storage - no emissions
FEP 031	F5 Baghouse Unloading
FEP 032	F4 Baghouse Unloading
FEP 180	Slurry Pit - no emissions
FEP 181	CO Safety Bleed (Fugitives)
FEP 184	Unloading (no enclosure) for EP5 - F5 Baghouse

## Emission point EP 006

5th floor charge/circular conveyor with the EP6-F3 Baghouse vent for one electric arc furnace installed in 1968.

FEP 023	Transfer Point to belt conveyor to furnace, controlled by EP6 - F3 baghouse
FEP 024	Transfer Point to rotary conveyor above furnace, controlled by EP6 - F3
	baghouse

## Emission point EP 004

Flare Stack / Venturi Scrubber to control emissions from the electric arc furnace. . The two Venturi Scrubbers and one flare stack burner were installed in 1974.

## Emission point EP 005

Tap Operation (Fumes) with EP5-F5, which consists of three hoods for TAP fumes at the electric arc furnace, with control EP5-F5.

FEP 028 Tap Fumes, controlled by EP8 - F4 baghouse, installed in 1988

## Emission point EP 008

Furnace building with EP8-F4 Baghouse vent. This is one electric arc furnace installed in 1968 with furnace building vent system with control EP8-F4

#### **Additional Conditions**

## 1. **Standards** - (Regulation 2.16, section 4.1.1)

## a. **Opacity**

The owner or operator shall not cause to be discharged into the atmosphere, any gases that contain PM equal to or in excess of:

EP 004	15% opacity (Regulation 6.46, section 3.2)
EP 005	15% opacity during normal operation (Regulation 6.46, section 3.2) or;
	25% opacity during tapping (Regulation 6.46, section 3.1.2.3)
EP 006	20% opacity (Regulation 6.09, section 3.1)
EP 008	15% opacity during normal operation (Regulation 6.46, section 3.2) or;
	25% opacity during tapping (Regulation 6.46, section 3.1.2.3)
FEP 024	15% opacity during normal operation (Regulation 6.46, section 3.2) or;
	25% opacity during tapping (Regulation 6.46, section 3.1.2.3)
FEP 028	15% opacity during normal operation (Regulation 6.46, section 3.2) or;
	25% opacity during tapping (Regulation 6.46, section 3.1.2.3)
EP 184	15% opacity during normal operation (Regulation 6.46, section 3.2) or;
	25% opacity during tapping (Regulation 6.46, section 3.1.2.3)
EP6-F3	15% opacity (Regulation 6.46, section 3.2)
EP8-F4	15% opacity (Regulation 6.46, section 3.2)

# b. **PM** (Regulation 6.09, section 3.4, 3.5)

The owner or operator shall not allow the emission of PM for EP 006 to exceed 42.75 pounds per hour.

# c. **SO<sub>2</sub>** (Regulation 6.10, Section 4)

The owner or operator shall not allow the  $SO_2$  emissions to exceed 2000 ppm by volume, at 0% oxygen.

## d. **CO** (Regulation 6.10, Section 5)

The owner or operator shall not allow combustion to be less than 1300 degrees F for 0.5 sec. for the flare stack burner EP 004.

## 2. **Monitoring** (Regulation 2.16, Section 4.1.9.1.2)

## a. **Opacity**

- i. Weekly/Monthly visual emissions survey
  - The owner or operator shall, to demonstrate compliance with the opacity standard, conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, for stacks from EP 024; EP6 F3 baghouse, EP8 F4 baghouse, EP5 F5 baghouse, and EP 004 flare stack; and the fugitive points of emission from the upper reaches of the furnace building, including EP 006.
  - 2) For the Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
  - 3) At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 22 for fugitive emissions from the building and a Method 9 for stack emissions from EP6-F3 and EP8-F4 within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in Additional Condition 2.a.i.1.
  - 4) If an Emission Point is not being operated during a given week, then no visible emission survey needs to be performed and a negative declaration may be entered in the record.
  - 5) Though not required by Method 22 procedures, all Method 22 Tests performed on this emission unit only shall be performed by an individual certified to perform Method 9 Tests.

#### ii. Daily/Weekly Visual Emissions Test

- The owner or operator shall, to demonstrate compliance with the opacity standard, perform or cause to be performed a daily Method 22 for fugitive emissions from the PM Emission Points EP 005 and EP 008. For EP 005, alternating tapping ports shall be observed on alternating days. No more than four Emission Points shall be observed simultaneously. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance.
- 2) For Emission Points not exceeding the opacity standard for twelve consecutive operating weeks, the owner or operator may elect to perform or cause to be performed a weekly Method 22 for the fugitive emissions. No more than four Emission Points shall be observed simultaneously.
- 3) If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission monitoring shall be conducted as indicated in item #2.a.ii.1).
- 4) If an Emission Point is not being operated during a given week, then no visible emission survey needs to be performed and a negative declaration may be entered in the record.
- 5) Though not required by Method 22 procedures, all Method 22 Tests performed on this emission unit only shall be performed by an individual certified to perform Method 9 Tests.
- iii. The owner or operator shall maintain the pressure drop across the control device (EP5-F5 baghouse) to a range of 2" to 12" water column.

#### b. PM

- i. Monitoring is not required for Emission Point EP 006 as calculations show that the applicable PM emission limit of 30.5 pounds per hour cannot be exceeded without controls.
- c. **SO**<sub>2</sub> (Regulation 6.10, Section 4)

The owner or operator shall uses coke that contains no more than 3% sulfur by weight.

- d. **CO** (Regulation 6.10, Section 5)
  - i. There is no feasible method of recording stack gas temperatures. See comment 4.

ii. The owner or operator shall maintain the pressure drop across venturi scrubber and demister at 40 inches to 80 inches.

## 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

#### a. **Opacity**

- i. Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed.
- ii. If emission points are not in operation when the survey in conducted, records shall be maintained, indicating this inactive condition.
- iii. The owner or operator shall keep daily records of pressure drop across EP5-F5. The records shall contain:
  - 1) Date and time of the recording
  - 2) The pressure drop, in inches of water
  - 3) Name of the person who performed the recording
  - 4) If parameter was outside the normal operating bounds, what was done to correct the problem.

#### b. PM

Record keeping is not required for EP 006

#### c. $SO_2$

The owner or operator shall keep records of the process throughput and hours of operation and the % sulfur content, by weight in the coke.

#### d. CO

- i. The owner or operator shall keep records of the process throughput and hours of operation for the calculation of emissions. The owner or operator shall maintain test results, as required in 2.d.
- ii. The owner or operator shall record the pressure drop across the scrubber, on a daily baisis.

## 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

### a. **Opacity**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for opacity:

- i. Emission Unit ID number and Emission ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none)
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.i.3), 2.a.ii.3) or 2.a.iii.

#### b. **PM**

No compliance reports are required.

## $c. SO_2$

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for  $SO_2$ :

- i. Emission Unit ID number and Emission ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Sulfur content test
- iv. Description of any period, when the sulfur content was exceeded, what was done to correct the exceedance, and length of time the exceedance occurred.

#### d. CO

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for CO:

- i. Emission Unit ID number and Emission ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and duration of any period of flare outage
- iv. Description of any corrective action taken to restore the flares operation and what was done to assure this won't occur again.

v. Description of any corrective action taken to restore 2.d.ii.

## **Comments**

- 1. Emission points EP 006 and EP 008 are subject to District Regulation 6.46, as the furnace operation commenced before Oct. 21, 1974.
- 2. Emission point EP 004 is subject to District Regulation 6.10, as the furnace operation commenced before April 19, 1972.
- 3. The formula for calculation of SO<sub>2</sub> emissions is located in the Title V permit application.
- 4. Regulation 6.10 requires combustion at 1300 °F for 0.5 sec. The Company has found that a Pyrometer is not technically feasible in this flare.
- 5. The venturi scrubbers remove impurities from the CO off-gas to provide a clean, combustable product.

Permit No. 140-97-TV (R1)

Emission Unit U5 Description: Crush Unit

## **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Section(s)
6.09	Standards of Performance for Existing Process Operations	1, 2, 3, & 5
7.08	Standards of Performance for New Process Operations	1, 2, & 3

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Number	Title	Applicable Section(s)
5.14	Hazardous Air Pollutants and Source Categories	1, 2, & 3

## **Allowable Emissions:**

Identification	Pollutant	Limit/Standard	Applicable Regulation
	PM	39.96 pounds/hour	6.09, section 3.4
EP 10	VOC	See Additional Condition No.1.c.	6.43, section 9.4
	PM	39.96 pounds/hour	6.09, section 3.4
EP 11	VOC	NA	

# **Components:**

Emission Point EP 010

Crusher Box and Unit #1 Conveyor with control EP10 - F6 (installed 1976)

## Emission Point EP 011

This Crush system is composed of a group of materials handling equipment, with controlled and uncontrolled fugitive emissions points. These were installed in the 1940's and except for

FEP 042, are all located under roof. Any emissions are through structure doors and vents. Control for some of these fugitive emissions points is provided by the EP10 - F6 baghouse.

FEP 033	Crusher Box
FEP 034	Crusher Box
FEP 035	Primary Crusher
FEP 036	Primary Crusher
FEP 037	Crusher Box and Unit #1 Conveyor with control EP10-F6
FEP 038	Crusher Box and Unit #1 Conveyor with control EP10-F6
FEP 039	Unit #2 Conveyor Loading
FEP 040	Unit #2 Conveyor Discharge
FEP 041	Unit #3 crusher Return
FEP 042	Flo-Bin Loading (located under roof)
FEP 043	Receiving Bin Vent
FEP 044	Flo-Bin Loading from Receiving Bin
FEP 045	Louisville Bin Vent

- 1. **Standards** (Regulation 2.16, Section 4.1.1)
  - a. **Opacity** (Regulation 6.09, Section 3.1)

The owner or operator shall not cause to be discharged into the atmosphere, any gases that contain PM equal to or in excess of 20% opacity.

b. **PM** (Regulation 6.09, section 3.4)

The owner or operator shall not allow the emission of PM to exceed 39.96 pounds per hour for EP 010 and EP 011

c. **VOC** (Regulation 6.43, section 9.4)

The owner or operator shall, averaged over one calendar month periods, allow a minimum of 60 tons per day of calcium carbide to by-pass the packing and screening process and be transported directly to the back end (Emission Unit 6).

- 2. **Monitoring** (Regulation 2.16, Section 4.1.9.1.2)
  - a. **Opacity** 
    - i. The owner or operator shall, to demonstrate compliance with the opacity standard, conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Points; for the stack from EP10 F6 baghouse; and EP 010 and EP 011 at doors and vents to outside; and FEP 042. No more than four Emission Points shall be observed simultaneously.
    - ii. For Emission Points without observed visible emissions during twelve consecutive weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
    - iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions from EP10-F6 or Method 22 for fugitive emissions from building openings for EP 010 and EP 011, within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 1.a.i.

iv. If an Emission Point is not being operated during a given week, then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

#### b. **PM**

- i. The PM emissions for EP 010 shall be calculated by multiplying the throughput times the emission factor. Such emissions from this entire process are calculated using an emission factor for calcium carbide manufacturing of 0.11 lbs (emissions) per ton (throughput). The source for this emission factor is AP-42 guidance 11.4, Table 11.4-2.
- ii. The owner or operator shall maintain the pressure drop across the control device (EP10-F6 baghouse) to a range of 1" to 3" water column.
- c. **VOC** (See Additional Condition 3.c)
- 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

## a. **Opacity**

- i. Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed.
- ii. If emission points are not in operation when the survey in conducted, records shall be maintained, indicating this inactive condition.

#### b. **PM**

- i. The owner or operator shall keep records for EP 010 of process throughput and hours of operation for calculation of PM emissions.
- ii. The owner or operator shall keep daily records of pressure drop across EP10-F6. The records shall contain:
  - 1) Date and time of the recording
  - 2) The pressure drop, in inches of water
  - 3) Name of the person who performed the recording
  - 4) If parameter was outside the normal operating bounds, what was done to correct the problem.
- c. **VOC** (Regulation 6.43, section 9.5)

The owner or operator shall record:

- i. The daily number and approximate weight of chills entering the primary crusher;
- ii. The time, date, and approximate weight for each particulate bin emptied from each baghouse on the crushing, packing and screening, and back end equipment;
- iii. Daily approximate weight of calcium carbide bypassing the packing and screening process and directly transported to the back end;
- iv. Total hours of operation per shift of the wet generator and the dry generator; and
- v. Time, date and duration of any interruption in piping acetylene off site.

## 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

## a. **Opacity**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports:

- i. Emission Unit ID number and Emission ID number.
- ii. The beginning and ending date of the reporting period.
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none).
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. **PM**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports:

- i. Emission Unit ID number and Emission Point ID number or FEP number.
- ii. The beginning and ending date of the reporting period.
- iii. Identification of all periods of exceedances, if any, of the hourly PM emissions limit including the quantity of excess emissions.

iv. Description of any corrective action taken or a negative declaration, if no corrective action was taken.

## c. VOC

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports:

- i. Emission Unit ID number and Emission Point ID number or FEP number.
- ii. The beginning and ending date of the reporting period.
- iii. Identification of all periods when the 60 tons per day by pass was not achieved.
- iv. Description of any corrective action taken or a negative declaration, if no corrective action was taken. Include the reason for a deviation and the tons per day bypassed.

#### **Comments**

Section 9 of Regulation 6.43 has been attached to the end of the Title V permit, in total and is considered part of the Title V permit.

Emission Unit U6 Description: Pack & Screen Unit

## **Applicable Regulations:**

	FEDERALLY ENFORCEABLE REGULATIONS		
Number	Title	Applicable Section(s)	
6.09	Standards of Performance for Existing Process Operations	1, 2, 3.1, 3.2, 3.3, 3.4, & 5	
6.43	Volatile Organic Compound Emission Reduction Requirements	9	
7.08	Standards of Performance for New Process Operations	1, 2, 3.1, & 3.2	

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Number	Title	Applicable Section(s)
5.14	Hazardous Air Pollutants and Source Categories	1, 2, & 3

## **Allowable Emissions:**

Identification	Pollutant	Limit/Standard	Applicable Regulation
U6	Opacity	<20%	6.09, section 3.3.1
EP 012	PM	27.04 pounds/hour	6.09, section 3.4
EP 013	PM	2.68 pounds/hour	6.09, section 3.4
EP 014	PM	31.39 pounds/hour	6.09, section 3.4
EP 015	PM	31.39 pounds/hour	6.09, section 3.4
EP 016	PM	29.83 pounds/hour	7.08, section 3.3.1

## **Components:**

Emission Point EP 012

This Pack & Screen subsystem is composed of material handling equipment, (FEPs 046 through 108, 186 through 187, and 189 through 192). This emission point is located under

roof in the Pack building. Any emissions escape is through structure doors and building vents. Partial control for some of the FEP's is provided by the EP13-F7 baghouse. All of the following material handling equipment was installed in the 1940's:

FEP 046	Loading point
FEP 047	Unit #13 Apron Conveyor Loading
FEP 049	Bin Loading from Unit #14A Bucket Elevator to Bin Vent
FEP 050	Unit #14 Bucket Elevator Clean Out
FEP 055	18A and/or 18C Conveyor Discharge
FEP 056	18C Conveyor Discharge
FEP 057	18A Conveyor Discharge
FEP 058	Bin Fill
FEP 060	#20 Belt Discharge
FEP 062	Bin Loading from Unit #12 Bucket Elevator to bin Vent
FEP 063	Bin Fill from #20 Belt Conveyor
FEP 064	Bin (filled from #20 Belt Conveyor), Unloading Point
FEP 065	Bin Fill from #18B Conveyor
FEP 066	Bin (filled from #18B Conveyor), Unloading Point
FEP 067	Bin Fill
FEP 068	Bin (filled from #18B Conveyor), Unloading Point
FEP 069	Bin Loading Point
FEP 073	25A Conveyor Discharge
FEP 074	25B Conveyor Discharge
FEP 075	Unit # 29A Conveyor Discharge
FEP 076	Conveyor Discharge from #25A Conveyor
FEP 078	Bin Fill from Conveyor after #25A Conveyor
FEP 079	Bin (filled from Conveyor after #25A Conveyor), Unloading Point
FEP 080	Bin Fill from #25B Conveyor
FEP 081	Bin (filled from Conveyor #25B), Unloading Point, Loading Point
FEP 082	Bin Fill from Conveyors after 25 A&B and from #29 Conveyor
FEP 083	Bin from #29 Conveyor unloading Point
FEP 084	Unit #33 Screen Discharge (1)
FEP 085	Unit #33 Screen Discharge (2)
FEP 086	Unit #33 Screen Discharge (3)
FEP 087	Unit #33 Screen Discharge (4)
FEP 088	Loading Points from #37 Screw Conveyor and Conveyor after #37 Conveyor
FEP 089	Conveyor #40A Wipe Transfer Points
FEP 090	Transfer Point from #40A Conveyor
FEP 091	Conveyor #40B Wipe Transfer Point
FEP 092	Transfer Point from #40A & 40B Conveyors
FEP 093	Conveyor #40C Wipe Transfer Point
FEP 096	Loading Point #37 Conveyor
FEP 097	Unloading Point from Bin for #40A & 40C Conveyors
FEP 098	First Loading Point from Middle of Screw Conveyor, Unit 41A
FEP 099	Second Loading Point from Screw Conveyor, Unit 41A
FEP 100	Loading Point from End of Screw Conveyor, Unit 41A
FEP 101	Unit 45 Bin Vent

Unit 45 Loading Point (1)
Unit 45 Loading Point (2)
Unit 49 Bin Vent
Unit 49 Bin Loading Point (1) to Unit 50
Unit 49 Loading Point (2)
Loading Point from Unit 48 Bin
Loading Point from Unit 52 Bin
Bin Fill from Unit #33 Screen
Unloading Point from Bin for Unit #33 Screen
Bin Fill from Unit #33 Screen
Unloading Point from Bin for Unit #33 Screen
Bin Fill from Unit #33 Screen
Unloading Point from Bin for Unit #33 Screen & Belt Conveyor

## Emission Point EP 013

This Pack and Screen equipment was installed in the 1940s, with control EP13-F7, one fabric filter, with one stack. No FEP #'s for this Emission Point.

## Emission Point EP 014

Back end operations installed in the late 1960's. It is controlled by a fabric filter, EP14 - F8, with one stack.

No FEP #'s for this Emission Point

#### Emission Point EP 015

Back end system which is composed of material handling equipment (FEPs 109-133,185,193-194, all located under roof. Any emissions escape is through structure doors and vents. Partial control for some of the FEP's is provided by the EP14 - F8 baghouse. The equipment listed immediately below is inside a building or covered. These are equipment descriptions. The equipment listed below was installed in the late 1960's.

FEP 109	13 Conveyor Feed
FEP 110	13 Conveyor discharge, controlled by EP14- F8 baghouse
FEP 111	Elevator to elevator transfer point, controlled by EP14- F8 baghouse
FEP 112	Elevator Discharge, controlled by EP14- F8 baghouse
FEP 113	Louisville Conveyor Loading Point, controlled by the F7 baghouse near Pack
	Dept.
FEP 114	Weigh Feeder Loading
FEP 115	Incline Elevator Discharge
FEP 116	Floppy Gate (1) Discharge to Conveyor
FEP 117	Floppy Gate (2)
FEP 118	No. 6 Bin Vent, inside building and vents inside building
FEP 119	No. 5 Bin Vent, inside building and vents inside building

FEP 120	No. 4 Bin Filling
FEP 121	No. 3 Bin Filling
FEP 122	No. 2 Bin Vent, inside and vents inside building
FEP 123	No. 1 Bin Filling, inside building and vents inside building
FEP 124	Track 3 Rail Loading, under roof, but sides not enclosed
FEP 125	Silo Elevator vent, powered bin vent, inside and vents inside building
FEP 126	Silo vent, controlled by powered bin vent, inside and vents inside building
FEP 127	Elevator, controlled by powered bin vent, inside and vents inside building
FEP 128	Unit 80 Conveyor discharge, controlled by EP14- F8 baghouse
FEP 129	Unit 80 Conveyor feed, controlled by EP14- F8 baghouse
FEP 130	Calvert City R.R. Hopper, under roof, open building ends
FEP 131	Vibrating Feeder, controlled by EP14- F8 baghouse
FEP 132	Under car Conveyor discharge, controlled by EP14- F8 baghouse
FEP 133	Under car Conveyor discharge to Conveyor, controlled by EP14-F8
	baghouse
FEP 185	F8 Baghouse Unloading, enclosed screw conveyor to building
FEP 193	Transfer Point
FEP 194	Transfer Point

## Emission Point EP 016

Desulfurization system which is composed of material handling equipment (FEPs 134-152), all located under roof. Any emissions escape is through structure doors and vents.

The equipment listed below is inside a building or covered. These are equipment descriptions. The equipment listed below, through FEP 152 was installed in 1978.

FEP 134	Container Fill from #2 Bin
FEP 135	Container Fill from #1 Bin
FEP 136	Transporter Fill from #2 Bin, any emissions escape is through building doors
FEP 137	Carbide Bin Fill from Transporter
FEP 138	Additive A Container Fill, any emissions escape is through building doors
FEP 139	Additive B Container Fill, any emissions escape is through building doors
FEP 140	Mixer Bin Venting with vent filter, inside building and vents inside building
FEP 141	Loading Screw Venting with vent filter, inside building and vents inside
	building
FEP 142	Container Fill from Screen
FEP 143	Shipping Vessel Loading
FEP 144	Container to Container Transfer at Transfer Station
FEP 145	Shipping Vessel Loading from Loading Bin
FEP 146	Loading Screw Venting with bin vent
FEP 147	Shipping Vessel Loading Screw
FEP 148	Transporter Loading from Loading Screw
FEP 149	No. 7 Bin Vent
FEP 150	Container Fill Station #1
FEP 151	Container Fill Station #2
FEP 152	Container Fill Station #3

- 1. **Standards** (Regulation 2.16, Section 4.1.1)
  - a. **Opacity** (Regulation 6.09, section 3.1 and Regulation 7.08, section 3.1.1)

The owner or operator shall not cause to be discharged into the atmosphere, any gases that contain PM equal to or in excess of 20% opacity.

- b. **PM** (Regulation 6.09, section 3.4,3.5)
  - i. The owner or operator shall not allow the emission of PM to exceed 27.04 pounds per hour for EP 012.
  - ii. The owner or operator shall not allow the combined emissions of PM to exceed 2.68 pounds per hour for EP 013.
  - iii. The owner or operator shall not allow the emission of PM to exceed 31.39 pounds per hour for EP 014 and EP 015.
  - iv. The owner or operator shall not allow the emission of PM to exceed 29.83 pounds per hour for EP 016.
- c. See Emission Unit E5, additional condition 1.c.
- 2. **Monitoring** (Regulation 2.16, Section 4.1.9.1.2)
  - a. **Opacity** 
    - i. The owner or operator shall, to demonstrate compliance with the opacity standard, conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Points; the stack from EP13 F7 baghouse and the stack from EP14 F8; and the building openings for EP 012, EP 013, EP 014, EP 015, and EP 016. No more than four Emission Points shall be observed simultaneously.
    - ii. For Emission Points without observed visible emissions during twelve consecutive weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
    - iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions from EP13-F7 and EP14-F8 or Method 22 for fugitive emissions from all other points within 24 hours of the initial observation. If the opacity standard is exceeded,

the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 1.a.1.

iv. If an Emission Point is not being operated during a given week, then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

#### b. **PM**

- i. Monitoring is not required for EP 016 as calculations show that the applicable PM emission limit of 29.8 pounds per hour cannot be exceeded without controls.
- ii. The owner or operator shall maintain the pressure drop range of 1" to 69.5" water column, across the control device EP 013-F7.
- iii. The owner or operator shall maintain the pressure drop range of 3" to 9" water column, across the control device EP 014-F8.
- c. See Emission Unit E5, additional condition 2.c.
- 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

#### a. **Opacity**

- i. Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed.
- ii Sufficient records shall be maintained, if emission points are not in operation when the survey in conducted, indicating this inactive condition.

#### b. **PM**

- i. The owner or operator shall maintain records of the daily pressure drop readings of EP 013-F7 and EP 014-F8. The records shall contain:
  - 1) Date and time of the recording
  - 2) The pressure drop, in inches of water
  - 3) Name of the person who performed the recording

- 4) If parameter was outside the normal operating bounds, what was done to correct the problem.
- ii. Record keeping for PM is not required for EP 016.
- c. See Emission Unit E5, additional condition 3.c.
- 4. **Reporting** (Regulation 2.16, section 4.1.9.3)
  - a. Opacity

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for opacity:

- i. Emission Unit ID number and Emission ID number
- ii. The beginning and ending date of the reporting period.
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none)
- iv. Description of any corrective action taken pursuant to Additional Condition 2.1.3

#### b. **PM**

- i. The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for PM:
  - 1) Emission Unit/Point ID number and Stack ID number;
  - 2) The beginning and ending date of the reporting period;
  - 3) Description of any corrective action taken pursuant to Additional Condition 3.a.iv.
  - 4) A negative declaration, if no corrective action taken.
- ii. No PM compliance reports are required for EP 016.
- c. See Emission Unit E5, additional condition 4.c.

#### **Comments**

- 1. EP13-F7 baghouse also controls some equipment for emission point EP 012, as well as for EP 013.
- 2. Emission Point 016 is subject to District Regulation 7.08 as the equipment was installed after Sept. 1, 1976.

Emission Unit U7 Description: Above-ground Fuel Storage Tanks

# **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation Title Applicable Section(s			
7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I)	1,2, 3, 5, & 6	

DISTRICT ONLY ENFORCEABLE REGULATIONS				
Regulation	Regulation Title Applicable Section(s)			
5.14	Hazardous Air Pollutants and Source Categories	1, 2, & 3		

# **Allowable Emissions:**

Pollutant	Limit/Standard
VOC	See Additional Condition No.1.

# **Component:**

FEP 178 Gasoline Tank, 500 gallon

1. **Standards** (Regulation 2.16, section 4.1.1)

Storage tanks shall be equipped with the following:

- a. A submerged fill pipe;
- b. If the gasoline storage tank is equipped with a separate gauge well, a gauge well drop tube shall be installed which extends to within six inches of the bottom of the tank;
- c. Vent line restrictions on the affected facility; and
- d. Vapor balance system and vapor tight connections on the liquid fill and vapor return hoses. The cross-sectional area of the vapor return hose and any other vapor return passages in the circuit connecting the vapor space in the service station tank to that of the truck tank must be at least 50% of the liquid fill hose cross-sectional area for each tank and free of flow restrictions to achieve acceptable recovery. The vapor balance equipment must be maintained according to the manufacturer's specifications. The type, size and design of the vapor balance system are subject to the approval of the District.
- 2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

None.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

None.

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

None.

Emission Unit U8 Description: Acetylene and Hydrate Unit

# **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation	Title	Applicable Section(s)	
6.09	Standards of Performance for Existing Process Operations	1, 2, 3, & 5	
6.24	Standard of Performance for Existing Sources Using Organic Materials	1,2, 3.3, 4, 5, 6 & 7	
6.39	Standard of Performance for Equipment Leaks of Volatile Organic Compounds in Existing Synthetic Organic Chemical and Polymer Manufacturing Plants	1, 2, 3, & 5	

DISTRICT ONLY ENFORCEABLE REGULATIONS			
Regulation Title Applicable Section			
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5 & 6	

# **Allowable Emissions:**

Identification	Pollutant	Limit/Standard	Applicable Regulation
	Opacity	<20%	6.09, section 3.3.1
	PM	See A.C. 1.b.iii	6.09, section 3.4 or 3.5
EP 018	VOC	See EP 019	40 CFR 60, Subpart VV sections 60.480 through 60.489
	VOC	<450 pounds per hour and < 3000 pounds per day of a class III solvent	6.24, section 3.3
	Opacity	<20%	6.09, section 3.3.1
EP 019	PM	See A.C. 1.b.i and ii	6.09, section 3.4 or 3.5
EP 020	TAPs	< ASL	5.11, section 2

## **Components:**

EP 018 The Acetylene/hydrate system is composed of a group of uncontrolled fugitive emissions points. The equipment listed below was installed in 1967 or before.

EP 021	Two Acetylene Dry Generators and one Acetylene Wet Generator
FEP 153	No. 3 Carbide Conveyor
FEP 154	No. 4 Carbide Conveyor
FEP 155	No. 5 Carbide Conveyor
FEP 156	Gas Holder
FEP 157	Reslurry Trough
FEP 158	East Hydrate Silo Fill
FEP 159	Center Hydrate Silo Fill
FEP 160	West Hydrate Silo Fill
FEP 161	East Hydrate Silo Unloading Station
FEP 162	Center Hydrate Silo Truck Loading Station
FEP 163	West Hydrate Silo Truck Loading Station
FEP 188	Elevator Discharge to three silos

FEP 153 through 155, FEP 158 through 160 and FEP 188 are located within a building or otherwise covered.

## EP 019 Elevator vent and hydrate slurry pit

FEP 164	Elevator Vent installed in 1967
FEP 165	Hydrate Slurry Pit installed in 1967

The equipment listed is located inside a building or otherwise covered.

## EP 020 Condensate returns and scrubber system

FEP 166	Gas Holder Condensate Return
FEP 167	Gas Holder Condensate Return
FEP 168	Caustic Tower
FEP 169	Sulfuric Acid Column
FEP 170	Sulfuric Acid Storage Tank
FEP 171	Condensate Tank
FEP 172	Compressor Water

The scrubber system is a product purification process, it is not a air contaminate control device

- 1. **Standards** (Regulation 2.16, section 4.1.1)
  - a. **Opacity** (Regulation 6.09, Section 3.1)

The owner or operator shall not cause to be discharged into the atmosphere, any gases that contain PM equal to or in excess of 20% opacity.

- b. **PM** (Regulation 6.09, section 3.4)
  - i. The owner or operator shall not allow the emission of PM to exceed 13.0 pounds per hour each for FEP 164 of EP 019;
  - ii. The owner or operator shall not allow the emission of PM to exceed 13.0 pounds per hour each for FEP 165 of EP 019;
  - iii. EP 018 allowable PM emissions are included in Additional Condition 1.b.iii of Emission Unit U6.

#### c. VOC

- i. The owner or operator shall comply with all applicable subsection of 40 CFR 60.482-1 through 60.482-10 for EP 018. (Regulation 40 CFR 60, Subpart VV, section 60.482)
- ii. The owner or operator shall not discharge into the atmosphere more than 3,000 pounds of organic material in any one day not more than 450 pounds in any hour, any Class III solvent or any material containing such solvent unless the discharge has been reduced by at least 85% by weight. (Regulation 6.24, sectiopn 3.3)
- d. **TAPs** (Regulation 5.11)

The owner or operator shall not allow the emission of TAPs to exceed the calculated adjusted significance level (ASL).

- 2. **Monitoring** (Regulation 2.16, Section 4.1.9.1.2)
  - a. **Opacity** 
    - i. The owner or operator shall, to demonstrate compliance with the opacity standard, conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the building openings for EP 018 and EP 019. No more than four Emission Points shall be observed simultaneously.

- ii. For Emission Points without observed visible emissions during twelve consecutive weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 22 for fugitive emissions from all other points within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 1.a.i
- iv. If an Emission Point is not being operated during a given week, then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

#### b. **PM**

See additional condition 3.b.

- c. **VOC** (Regulation 40 CFR 60, Subpart VV section 60.485)
  - i. The owner or operator shall have performed all tests and procedures specified in 40 CFR 60.485, as applicable to EP 018.
  - ii. See Additional Condition 3.c.ii.

## d. TAPs

No compliance monitoring required.

## 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

#### a. **Opacity**

- i. Records of the results of all visible emission surveys and tests performed for EP 018 & EP 019, shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed.
- ii. If emission points are not in operation when the survey in conducted, records shall be maintained, indicating this condition.

#### b. PM

Records shall be maintained for EP 018 and EP 019 that include the process throughput and hours of operation for calculation of PM emissions.

- c. **VOC** (Regulation 40 CFR 60, Subpart VV, section 60.486)
  - i. The owner or operator shall maintain all records specified in 40 CFR 60.486, that are applicable to EP 018.
  - ii. The owner or operator shall maintain records of process through put through the acetylene generators. They shall also maintain records of acetylene created.

#### d. TAPs

No recordkeeping required

## 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

## a. **Opacity**

The owner or operator shall include, at a minimum, for EP 018 & EP 019, the following information in the semi-annual compliance monitoring reports for opacity:

- i. Emission Unit ID number and Emission ID number
- ii. The beginning and ending date of the reporting period
- iii. The date, time, and results of each Method 22 conducted (or a negative declaration if none)
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.i.

## b. PM

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports:

- i. Emission Unit ID number and Emission Point ID number or FEP number.
- ii. The beginning and ending date of the reporting period.
- iii. Identification of all periods of exceedances of the hourly PM emissions limit including the quantity of excess emissions.
- iv. Description of any corrective action taken or a negative declaration, if no corrective action was taken.

## c. VOC

- i. The owner or operator shall report semi-annually all requirements specified in 40 CFR 60.487, as applicable to EP 018.
- ii. The owner or operator shall report semi-annually, quantity of acetylene produced and daily fugitive acetylene released from the operaton. The owner or operator shall report all instances where the VOC emission has exceeded the limits in additional condition 1.c.ii.

## d. TAPs

The are no compliance reporting requirements.

#### Comment

District Regulation 6.39, applies the standards of 40 CFR 60, Subpart VV to VOC emissions from SOCMI sources that commenced construction on or before January 5, 1981. Therefore, District Regulation 7.02 and Federal Regulation 40 CFR 60, Subpart VV do not apply as an applicable regulation but the content of 40 CFR 60, Subpart VV does apply and each applicable section has been cited in the text of this emission unit.

**Emission Unit U9 Description:** One, 3 MMBtu Boiler The unit combusts natural gas and the CO off-gas from the electric arc furnace

# **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS			
Number	Title	Applicable Section(s)	
7.06	Standards of Performance for New Indirect Heat Exchangers	1, 2, 3, 4 & 8	

## **Allowable Emissions:**

Identification	Pollutant	Limit/Standard	Applicable Regulation
	Opacity	See additional condition 1.a	7.06, section 4.2
EP 021	PM	0.56 pound per MMBtu	7.06, section 4.1.1
	$SO_2$	1.0 pound per MM Btu	7.06, section 5.1.1

# **Component:**

EP 021 Gas Fired boiler, 3 MMBtu

- 1. **Standards** (Regulation 2.16, section 4.1.1)
  - a. **Opacity** (Regulation 7.06, Section 4.2)

No owner or operator of an affected facility shall cause to be discharged into the atmosphere from the affected facility, emissions which exhibit greater than 20 % opacity except:

- i. for indirect heat exchangers with a heat input capacity of less than 250 million BTU/hr, a maximum of 40% opacity shall be permissible for not more than two consecutive minutes in any 60 consecutive minutes;
- ii. for indirect heat exchangers with a heat input capacity of less than 250 million BTU/hr, a maximum of 40% opacity shall be permissible for not more than six consecutive minutes in any 60 consecutive minutes during cleaning the fire box or blowing soot; or
- iii. for emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
- b. **PM** (Regulation 7.06, section 4.1.1)

The owner or operator shall not allow the emission of PM to exceed 0.56 pound per million Btu actual heat input.

c. SO<sub>2</sub> (Regulation 7.06, Section 5.1.1)

The owner or operator shall not allow the  $SO_2$  emissions to exceed 1 pound per million Btu actual heat input.

- 2. **Monitoring** (Regulation 2.16, Section 4.1.9.1.2)
  - a. **Opacity** 
    - i. The owner or operator shall, to demonstrate compliance with the opacity standard, conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Point for the stack from EP 021, at doors and vents to outside. No more than four Emission Points shall be observed simultaneously.
    - ii. For Emission Points without observed visible emissions during twelve consecutive weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.

- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 1.a.
- iv. If an Emission Point is not being operated during a given week, then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

#### b. PM

No compliance monitoring is required

## $c. SO_2$

No compliance monitoring is required.

## 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

## a. **Opacity**

- i. Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed.
- ii Sufficient records shall be maintained, if emission points are not in operation when the survey in conducted, indicating this inactive condition.

#### b. **PM**

No compliance record keeping is required.

## $c. SO_2$

No compliance record keeping is required.

## 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

## a. **Opacity**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports:

- i. Emission Unit ID number and Emission ID number.
- ii. The beginning and ending date of the reporting period.
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none).
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

## b. **PM**

No reporting is required.

## c. $SO_2$

No reporting is required.

## **Comment**

The District would have normally considered this emission unit as being an insignificant activity under Regulation 2.02 had it not been for the combustion of CO in this boiler.

Permit No. 140-97-TV (R1) Plant ID 0001

Unit U10 Description: Storm water Neutralization Unit

# **Applicable Regulations:**

DISTRICT ONLY ENFORCEABLE REGULATIONS			
5.12	Standards of Performance for New Sources Emitting Toxic Air Pollutants	1, 2, 3, 4 & 5	

## **Allowable Emissions:**

Identification	Pollutant	Limit/Standard	Applicable Regulation
FEP 173	TAPs	< ASL	5.12, section 2

# **Components:**

FEP 173 Acid Neutralization System

1. **Standards** - (Regulation 2.16, section 4.1.1)

**TAP**s (Regulation 5.12)

The owner or operator shall limit TAP emissions to below the calculated Adjusted Significance Level (ASL, unless modeling or a BACT analysis has been performed, submitted and approved by the District.

2. **Monitoring** - (Regulation 2.16, Section 4.1.9.1.2)

**TAPs** 

No compliance monitoring required.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

**TAPs** 

No compliance reporting required.

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

**TAPs** 

No reporting requirements

Emission Unit U11 Description: Tote Reconditioning Unit

# **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Number	Title	Applicable Section(s)
7.08	Standards of Performance for New Process Operations	1, 2, & 3
7.59	Standards of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations	1, 2, 5,6 & 7

DISTRICT ONLY ENFORCEABLE REGULATIONS			
Number	Title	Applicable Section(s)	
5.12	Standards of Performance for New Sources Emitting Toxic Air Pollutants	1, 2, 3, 4 & 5	

## **Allowable Emissions:**

Identification	Pollutant	Limit/Standard	Applicable Regulation
Unit U11	Opacity	<20%	7.08, section 3.1.1
	PM	2.34 pounds/hour	7.08, section 3.1.2
	VOC	5 tons per year	7.59, section 5.2
	TAPs	< ASL	5.12, section 2

# **Components:**

FEP 182 Container Shot Blasting

FEP 183 Container Painting

- 1. **Standards** (Regulation 2.16, section 4.1.1)
  - a. **Opacity** (Regulation 7.08, Section 3.1.1)

No person shall cause, suffer, allow or permit any continuous emission in the open air from the operation of any affected facility that is equal to or greater than 20 % opacity.

b. **PM** (Regulation 7.08, section 3.1.2)

The owner or operator shall not allow the emission of PM to exceed 2.34 pounds per hour for FEP 182 and FEP 183.

c. **VOC** (Regulation 7.59, section 5.2)

The owner or operator shall maintain the emission of VOC to 5 tons per year or less.

d. **TAP**s (Regulation 5.12)

The owner or operator shall limit TAP emissions to below the calculated Adjusted Significance Level (ASL, unless modeling or a BACT analysis has been performed, submitted and approved by the District.

- 2. **Monitoring** (Regulation 2.16, Section 4.1.9.1.2)
  - a. **Opacity** 
    - i. The owner or operator shall, to demonstrate compliance with the opacity standard, conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
    - ii. For Emission Points without observed visible emissions during twelve consecutive weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
    - iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all

practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 1.a.i.

iv. If an Emission Point is not being operated during a given week, then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

#### b. **PM**

See additional condition 3.b.

## c. VOC

See Additional Condition 3.c.

#### d. TAPs

No compliance monitoring required.

## 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

## a. **Opacity**

- i. Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed.
- Sufficient records shall be maintained, if emission points are not in operation when the survey in conducted, indicating this inactive condition.

#### b. **PM**

- i. The owner or operator shall maintain records of hours of operation and product throughput.
- ii. The owner or operator shall maintain material purchase records.
- iii. Calculation of PM emissions from the painting operation shall be based on AP 40 emission factors.
- iv. The PM emissions for FEP 182 shall be calculated by multiplying the throughput times the emission factor. Such emissions from this entire process are calculated using an emission factor for shot blasting, of 0.029 lb. emissions per lb. of shot. (The source for this emission factor is from MRI report, "Development of Particulate Emission Factors for Uncontrolled Abrasive Blasting Operations, Source Test Report, "April 1994. The MRI

report was prepared for U.S. EPA-OAQ and is provided in lieu of an AP-42 guide.)

#### c. VOC

- i. The owner or operator shall maintain material purchase records.
- ii. The owner or operator shall maintain records of annual VOC emissions based on a consecutive twelve month period.

#### d. TAPs

No compliance monitoring required.

## 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

#### a. **Opacity**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports:

- i. Emission Unit ID number and Emission ID number.
- ii. The beginning and ending date of the reporting period.
- iii. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none).
- iv. Description of any corrective action taken pursuant to Additional Condition 2.a.iii.

#### b. **PM**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports:

- i. Emission Unit ID number and Emission Point ID number or FEP number.
- ii. The beginning and ending date of the reporting period.
- iii. Identification of all periods of exceedances of the hourly PM emissions limit including the quantity of excess emissions.
- iv. Description of any corrective action taken or a negative declaration, if no corrective action was taken.

## c. VOC

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports:

- i. Emission Unit ID number and Emission Point ID number or FEP number.
- ii. The beginning and ending date of the reporting period.
- iii. Identification of all periods of exceedances of the annual VOC emission limit including the quantity of excess emissions.
- iv. Description of any corrective action taken or a negative declaration, if no corrective action was taken.

## d. TAPs

No reporting requirements

Emission Unit U12 Description: Non-halogenated Cold Solvent Metal Cleaners

# **Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS			
Regulation Title Applica		Applicable Sections	
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4, 5	
6.18	Standards of Performance for Existing Solvent Metal Cleaning Equipment	1, 2, 3, 4.1, 4.2	

DISTRICT ONLY ENFORCEABLE REGULATIONS			
Regulation	Title	Applicable Sections	
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, 4	
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, 5, 6	

## **Allowable Emissions:**

Pollutant	Limit/Standard	
TAPs	See Additional Condition # 3	
VOC	See Additional Condition #1	

# **Components:**

Non-halogenated cold solvent metal cleaning tank, rated capacity of 10 gallon each, installed in pre-1970. Fugitive emission point.

#### **1. Standards** Regulation 2.16, section 4.1.1)

#### a. **VOC**

- i. The cleaner shall be equipped with a cover. If the VOC volatility is greater than 15 mm Hg measured at 100°F or if the VOC is agitated or heated, then the cover shall be designed so that it can be easily operated with one hand.
- ii. The cleaner shall be equipped with a drainage facility such that VOC that drains off parts removed from the cleaner will return to the cleaner. If the VOC volatility is greater than 32 mm Hg measured at 100°F, then the drainage facility shall be internal so that parts are enclosed under the cover while draining. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system.
- iii. A permanent, conspicuous label summarizing the operating requirements specified in 1.a.vi, vii, and viii shall be installed on or near the cleaner.
- iv. If used, the VOC spray shall be a fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not cause excessive splashing.
- v. If the VOC volatility is greater than 32 mm Hg measured at 100°F or if the VOC is heated above 120°F, then one of the following control devices shall be used:
  - 1) Freeboard that gives a freeboard ratio equal to or greater than 0.7,
  - 2) Water cover (VOC must be insoluble in and heavier than water), or
  - 3) Other systems of equivalent control, such as a refrigerated chiller or carbon absorption.
- vi. Do not dispose of waste VOC or transfer it to another party in a manner that more than 20% by weight of the waste VOC can evaporate into the atmosphere. Store waste VOC only in covered containers,
- vii. Close degreaser cover whenever not handling a part in the cleaner, and
- viii. Drain cleaned parts until dripping ceases (15 seconds is usually necessary).
- ix Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F).

#### b. TAPs

Limit Toxic Air Pollutant (TAP) emissions from this source to no more than the Adjusted Significance Level (ASL) specified in Regulations 5.11 and 5.12 for this

emission unit, unless modeling or a BACT/RACT analysis has been performed to demonstrate compliance.

## **2. Monitoring**, Regulation 2.16, section 4.1.9.1.2)

#### a. **VOC**

See additional condition 3.a

## b. TAPs

The owner or operator shall calculate average hourly TAP emissions, based on records maintained for additional condition 3.a, to assure that the ASL has not been exceeded.

## **3. Record Keeping** (Regulation 2.16, section 4.1.9.2)

#### a. **VOC**

- i. The owner or operator shall keep monthly records of VOC usage for each emission point.
- ii. The owner or operator shall:
  - 1) The name and address of the solvent supplier,
  - 2) The date of the purchase,
  - 3) The type of the solvent, and
  - 4) The vapor pressure of the solvent measured in mm Hg at  $20^{\circ}$ C ( $68^{\circ}$ F).
- iii. The owner or operator shall maintain records of employee training for the proper operation of this emission unit. These records shall contain:
  - 1) The date of the training
  - 2) The name of the person trained
  - 3) Who performed the training

## b. TAPs

Based on 3.a, the owner or operator shall, on a monthly basis, calculate hourly TAP emissions to demonstrate compliance with additional condition 1.b.

## **4. Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories.

## a. VOC

The owner or operator shall report semi-annually the following for each emission point:

- i. Emission Unit ID number and Emission point ID number
- ii. The beginning and ending date of the reporting period
- iv. Identification of applicable equipment standard or record
- v. A declaration that the equipment standard or record is being maintained

## b. TAPs

The owner or operator shall report any occurrence where the calculated ASL was exceeded

#### **Permit Shield**

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all the conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance per District Regulation 2.16, section 4.6.1.1.

a. 40 CFR 63, Subpart XXX - National Emissions Standards for Hazardous Air Pollutants for Ferroalloys Production: ferromanganese and Silicomanganese.

There are no applicable requirements imposed on the source, although the source is within the source category, as defined.

b. 40 CFR 63, subpart Q - National Emissions Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers.

The subject chemicals for which the MACT applies have not been and are not being used in the cooling tower water.

#### **Off-Permit Documents**

There are no off-permit documents associated with this Title V permit.

## **Alternative Operating Scenario**

The company requested no alternative operating scenario in its Title V application.

Source-Wide HAP Speciation		
Pollutant	CAS#	
Formaldehyde	50-00-0	
Acrolein	107-02-8	
Benzene	71-43-2	
Toluene	108-88-3	
Xylenes	1330-20-7	
Naphthalene	91-20-3	
Phosphine	7803-51-2	
Phenol	108-95-2	
Aniline	62-53-3	

Insignificant Activities			
Description	Quantity	Basis	
Waste oil storage Tank <10 MM HG	1	Reg 2.02 Section 2.3.9.2	
Diesel Storage Tanks Annual Turnover < 2x Capacity	2	Reg. 2.02 Section 2.3.9.2	
FEP 174 Diesel Fuel Tank, 5000 gal. FEP 175 Diesel Fuel Tank, 5000 gal. FEP 176 Diesel Fuel Tank, 2000 gal. FEP 177 Diesel Fuel Tank, 500 gal. FEP 195 Heavy Oil Tank, 10600 gal. (installed prior to 1978)	5	Reg. 2.02 Section 2.3.9.2	
Natural Gas Boiler	1	Reg. 2.02 Section 2.1.1	
Research & Development Lab	1	Reg. 2.02 Section 2.3.2.7	
Internal Combustion Engines (Vehicles)	Various	Reg. 2.02, Section 2.2	
Brazing Soldering or Welding Operation	1	Reg. 2.02, Section 2.3.4	
Emergency Relief Vents or Ventilating Systems	Various	Reg. 2.02, Section 2.3.10	
Lab Ventilating & Exhaust Systems, Non- Radioactive Materials	Various	Reg. 2.02, Section 2.3.11	
Portable Diesel or Gasoline Storage Tanks	Various	Reg. 2.02, Section 2.3.23	

- A. Insignificant Activities are only those activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Equipment associated with a specific operation or process (Emission Unit) shall be listed with the specific process even though there may be no applicable requirements. Information contained in the permit and permit summary shall clearly indicate that those items identified with negligible emissions have no applicable requirements.
- B. Activities identified In Regulation 2.02, Section 2, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the Title V permit.
  - i. No facility, having been designated as an insignificant activity, shall be exempt from any generally applicable requirements which shall include a 20% opacity limit for facilities not otherwise regulated.

- ii. No periodic monitoring shall be required for facilities designated as insignificant activities.
- C. The Insignificant Activities table is correct as of the date of the permit was proposed for review by the USEPA, Region 4. The company shall submit an updated list of insignificant activities annually with the Title V compliance certification pursuant to District Regulation 2.16, section 4.3.5.3.6.